

Page 2
Serial No. 09/506,802

Claim 1. (Amended) A method for transmitting a data stream between a host controller and a peripheral device over an extended distance; said method comprising:

- a. feeding a first original, outgoing digital signal from a host controller to a local expander unit;
- [b. optionally converting said outgoing digital signal[s] into a converted outgoing signal having a format suitable for transmission over extended distances;]
- b. [c.] transmitting [either] said outgoing digital signal [or said converted outgoing signal,] as a outgoing transmission signal, over a signal distribution system;
- c. [d.] receiving said outgoing transmission signal at a remote expander unit;
- [e. optionally converting said outgoing transmission signal to said first original outgoing digital signal;]
- d. [f.] delivering said first original outgoing digital signal from said remote expander to at least one peripheral device;
- e. [g.] receiving, at said remote expander, a reply digital signal from said peripheral device;
- [h. optionally converting said reply digital signal into a converted reply signal having a format suitable for transmission over extended distances;]
- f. [i.] transmitting said reply digital signal [or said converted reply signal] as a reply transmission signal over said signal distribution system;
- g. [j.] receiving said reply transmission signal at said local expander;
- [k. optionally converting said reply transmission signal to said original reply digital signal;]
- h. [l.] storing said reply digital signal as a stored reply digital signal until the receipt of a subsequent original, outgoing digital signal from said host controller, which subsequent signal is the same as, or similar to, said first original outgoing digital signal; and
- i. [m.] forwarding said stored reply digital signal to said host controller in response to said subsequent original outgoing digital signal.

Claim 5. In part "d" of the claim, replace --asynchronous-- with --isochronous--

Page 3
Serial No. 09/506,802

Please add the following claim:

Claim 40. A method for transmitting a data stream between a host controller and a peripheral device over an extended distance; said method comprising:

- a. feeding a first original, outgoing digital signal from a host controller to a local expander unit;
- b. converting said outgoing digital signal into a converted outgoing signal having a format suitable for transmission over extended distances;
- c. transmitting either said converted outgoing signal, as a outgoing transmission signal, over a signal distribution system;
- d. receiving said outgoing transmission signal at a remote expander unit;
- e. converting said outgoing transmission signal to said first original outgoing digital signal;
- f. delivering said first original outgoing digital signal from said remote expander to at least one peripheral device;
- g. receiving, at said remote expander, a reply digital signal from said peripheral device;
- h. converting said reply digital signal into a converted reply signal having a format suitable for transmission over extended distances;
- i. transmitting said converted reply signal as a reply transmission signal over said signal distribution system;
- j. receiving said reply transmission signal at said local expander;
- k. converting said reply transmission signal to said reply digital signal;
- l. storing said reply digital signal as a stored reply digital signal until the receipt of a subsequent original, outgoing digital signal from said host controller, which subsequent signal is the same as, or similar to, said first original outgoing digital signal; and
- m. forwarding said stored reply digital signal to said host controller in response to said subsequent original outgoing digital signal.

Page 3
Serial No. 09/506,802

Please add the following claim:

Claim 40. A method for transmitting a data stream between a host controller and a peripheral device over an extended distance; said method comprising:

- a. feeding a first original, outgoing digital signal from a host controller to a local expander unit;
- b. converting said outgoing digital signal into a converted outgoing signal having a format suitable for transmission over extended distances;
- c. transmitting either said converted outgoing signal, as a outgoing transmission signal, over a signal distribution system;
- d. receiving said outgoing transmission signal at a remote expander unit;
- e. converting said outgoing transmission signal to said first original outgoing digital signal;
- f. delivering said first original outgoing digital signal from said remote expander to at least one peripheral device;
- g. receiving, at said remote expander, a reply digital signal from said peripheral device;
- h. converting said reply digital signal into a converted reply signal having a format suitable for transmission over extended distances;
- i. transmitting said converted reply signal as a reply transmission signal over said signal distribution system;
- j. receiving said reply transmission signal at said local expander;
- k. converting said reply transmission signal to said reply digital signal;
- l. storing said reply digital signal as a stored reply digital signal until the receipt of a subsequent original, outgoing digital signal from said host controller, which subsequent signal is the same as, or similar to, said first original outgoing digital signal; and
- m. forwarding said stored reply digital signal to said host controller in response to said subsequent original outgoing digital signal.